

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 85-11

WASTE DISCHARGE REQUIREMENTS FOR:

CONTRA COSTA WATER DISTRICT  
BOLLMAN WATER TREATMENT PLANT  
ON-SITE ALUM SLUDGE DRYING PONDS AND DISPOSAL SITES  
CONCORD, CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. Contra Costa Water District, hereinafter called the discharger, submitted a report of waste discharge dated June 13, 1983.
2. The discharger proposes to establish and operate on-site drying ponds and disposal sites (hereinafter called the site when referred to as a whole) for the alum sludge from their Bollman Water Treatment Plant. The sludge is a result of alum (aluminum sulfate) addition to raw water during the treatment process. Sludge from the plant will be pumped to the drying ponds, after settling, some of the water will be decanted off and returned to the treatment plant. The sludge will then evaporate to a managable consistency and trucked to the disposal areas where it will be spread evenly and compacted. The permeability of the compacted sludge is  $7 \times 10^{-8}$  cm/s.
3. The sludge is non-toxic and can be considered as inert waste if kept between the pH range of 5.0 to 8.5.
4. The site is underlain by clay alluvium with scattered lenses of silt, silty sand, and clayey sand, and is of medium permeability. The land for the drying ponds is owned by the discharger, the land for the disposal areas will be acquired from Tosco Corporation prior to commencement of discharge. The locations of the treatment plant and proposed sites are shown in Attachment A.
5. The site is adjacent to Mallard Reservoir which is operated by the discharger. Land within 1000 feet of the site, excluding the reservoir, is open space.
6. The beneficial uses of Mallard Reservoir are:
  - a. Municipal and Domestic Supply
  - b. Agricultural Supply
  - c. Industrial Service Supply
  - d. Warm Fresh Water Habitat
  - e. Wildlife Habitat
  - f. Fish Spawning

7. The potential beneficial uses of the groundwater in the area are:
  - a. Municipal Supply
  - b. Industrial Process and Service Supply
  - c. Agricultural Supply
8. The actual designs for the proposed site, at the time of adoption of these requirements, are tentative.
9. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on July 21, 1982, and this order implements the water quality objectives stated in the Plan.
10. The discharger has prepared a Negative Declaration in accordance with the California Environmental Quality Act. The Regional Board has reviewed the project and concurs with the discharger finding that the project will not have a substantial adverse impact on the environment.
11. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this (proposed) discharge.
12. The Board in a public meeting heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that the discharger, and any other person(s) that operates this site, shall comply with the following:

A. Waste Disposal Specifications

1. The treatment or disposal of waste shall not cause pollution or nuisance as defined in Section 13050 of the California Water Code.
2. A minimum freeboard of two (2) feet shall be maintained in the drying ponds.
3. The contents of the site shall be maintained within the pH range of 5.0 to 8.5 to prevent leaching of contaminants away from the site.
4. All dikes at the site shall be maintained to provide adequate waste containment. The waste material shall be confined to the designated disposal areas shown on Attachment A.
5. The erosion of deposited waste materials from the disposal area(s) shall be prevented.
6. The disposal of waste shall not degrade the quality of any usable groundwater.
7. The discharger shall remove and relocate any wastes which are discharged at this site in violation of these requirements.

B. Waste Disposal Prohibitions

1. The discharge of wastes other than alum sludge from the treatment plant shall be prohibited.
2. The discharge of waste to surface waters is prohibited.

C. Provisions

1. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operation personnel.
2. The discharger shall submit final plans along with proof of ownership for the site 60 days prior to commencement of waste discharge.
3. The discharger shall comply with the self-monitoring program as issued by the Executive Officer.
4. The discharger shall file with this Board a report of any material change or proposed change in the character, location or quantity of this waste discharge. For the purposes of these requirements, this includes any proposed change in the boundaries, contours or ownership of the treatment and disposal areas.
5. Ninety (90) days prior to discontinuing the use of this site for waste treatment or disposal the discharger shall inform the Board, and submit a report describing the methods and controls to be used to assure protection of the quality of surface waters of the area during final operations and with any proposed subsequent use of the land.
6. This Board considers the property owner to have a continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge and water applied to this property during the subsequent use of the land for other purposes.
7. The discharger shall permit the Regional Board:
  - (a) Entry upon premises on which waste are located or in which any required records are kept,
  - (b) Access to copy any records required to be kept under terms and conditions of this Order,
  - (c) Inspection of monitoring equipment or records, and
  - (d) Sampling of any discharge.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Region on January 16, 1985.

Roger B. James  
Executive Officer

Attachment:

Attachment A (Map)

